



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Frank O'Bannon
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100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Tom Stiens
Holland Colors Americas, Inc.
1500 Progress Drive
Richmond, Indiana 47374

Re: Registered Construction and Operation Status
177-16859-00104

Dear Mr. Stiens:

The application from Holland Colors Americas, Inc., received on December 5, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following colorant manufacturing source, to be located at 823 Roundbarn Road, Richmond, Indiana 47374, Indiana, is classified as registered:

- (a) One (1) Holcosil process, installed in 2000, consisting of mixing and packaging, controlled with a portable dust collector, capacity: 384 pounds per hour.
- (b) One (1) Holcoprill process, consisting of mixing, extrusion, finishing, screening, and packaging, controlled by three (3) dust collectors, capacity: 40 pounds per hour.
- (c) Laboratory extruder, controlled by one (1) dust collector.
- (d) LSR Production, capacity: 90,000 pounds per year.

The following conditions shall be applicable:

- 1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- 2. Any change or modification which may increase the potential to emit total HAPs, VOC, PM or PM₁₀ to twenty five (25) tons per year, or a single HAP to ten (10) tons per year from this source shall require approval from IDEM, OAQ prior to making the change.
- 3. Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) Holcosil process shall not exceed 1.36 pounds per hour when operating at a process weight rate of 0.192 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The portable dust collector shall be operated at all times that the Holcosil mixer is in operation, in order to comply with this limit.

4. Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) Holcoprill process or the laboratory extruder shall not exceed 0.551 pounds per hour when operating at a process weight rate less than one hundred (100) pounds per hour.

The associated dust collectors shall be operated at all times that one (1) Holcoprill process or the laboratory extruder is in operation, in order to comply with this limit.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Branch
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

EAL/MES

cc: File - Wayne County
Wayne County Health Department
Air Compliance - D. J. Knotts
Permit Filing - Lisa Lawrence
Air Programs Section- Michele Boner
Compliance Branch - Karen Nowak

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Holland Colors Americas, Inc.
Address:	823 Roundbarn Road, Richmond, Indiana 47374
City:	823 Roundbarn Road, Richmond, Indiana 47374
Authorized individual:	Tom Stiens
Phone #:	765 - 935 - 0329
Registration #:	177-16859-00104

I hereby certify that Holland Colors Americas, Inc. is still in operation and is in compliance with the requirements of Registration **177-16859-00104**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Holland Colors Americas, Inc.
Source Location:	823 Roundbarn Road, Richmond, Indiana 47374
County:	Wayne
SIC Code:	2816
Operation Permit No.:	R 177-16859-00104
Permit Reviewer:	Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed an application from Holland Colors Americas, Inc. relating to the construction and operation of a colorant manufacturing source.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units or pollution control devices at this source.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (a) One (1) Holcosil process, installed in 2000, consisting of mixing and packaging, controlled with a portable dust collector, capacity: 384 pounds per hour.

New Emission Units and Pollution Control Equipment

The source consists of the following new facilities/units:

- (b) One (1) Holcoprill process, consisting of mixing, extrusion, finishing, screening, and packaging, controlled by three (3) dust collectors, capacity: 40 pounds per hour.
- (c) Laboratory extruder, controlled by one (1) dust collector.
- (d) LSR Production, capacity: 90,000 pounds per year.

Existing Approvals

There are no existing approvals for this source.

Stack Summary

There are no stacks associated with this source.

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 5, 2002, with additional information received on January 9, January 13, and January 22, 2003.

Emission Calculations

- (a) Existing Holcosil production process:

Assume all solid material waste is PM emissions, assume all PM = PM₁₀
Annual solid material waste and loss: 2,849 lbs/yr
Production schedule: 8 hrs/day, 5 days/wk, 51 wks/yr = 2,040 hrs/yr
Material waste extrapolated to 8,760 hrs/yr (PM and PM₁₀):

$$2,849 \text{ lbs/yr} \times (8,760 \text{ hrs/yr} / 2,040 \text{ hrs/yr}) = 12,234 \text{ lbs/yr} = \mathbf{6.12 \text{ tons/yr}}$$

- (b) Proposed Holcoprill production process:

Assume all material waste is PM emissions, assume all PM = PM₁₀
Annual amount of material input to the process: 454,545 lbs/yr
Annual estimated yield at maximum capacity: 400,000 lbs/yr
Material input - Saleable product = Potential waste:

$$454,545 \text{ lbs/yr} - 400,000 \text{ lbs/yr} = 54,545 \text{ lbs/yr}$$

Six percent (6%) of the total input is waste that is captured and re-used as input to other batches:

$$454,545 \text{ lbs/yr} \times 0.06 = 27,273 \text{ lbs/yr}$$

Therefore, potential waste lost to the air = potential waste - recycled material:

$$54,545 \text{ lbs/yr} - 27,273 \text{ lbs/yr} = 27,272 \text{ lbs/yr} = \mathbf{13.6 \text{ tons/yr}}$$

- (c) Total source-wide PM and PM₁₀ emissions = Holcosil Emissions + Holcoprill emissions

$$6.12 + 13.6 = \mathbf{19.8 \text{ tons per year}}$$

- (d) The emissions associated with cleanup solvents were conservatively calculated to be 1.0 tons per year of VOC.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	19.8
PM ₁₀	19.8
SO ₂	-
VOC	1.00
CO	-
NO _x	-

HAPs	Potential To Emit (tons/year)
none	-

The potential to emit (as defined in 326 IAC 2-5.1-2) of PM and PM₁₀ are less than twenty-five (25) tons per year and greater than five (5) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Holcosil Process	6.12	6.12	-	-	-	-	-
Holcoprill Process	13.6	13.6	-	-	-	-	-

	Limited Potential to Emit (tons/year)						
Parts Washing	-	-	-	1.00	-	-	-
LSR Process	-	-	-	-	-	-	-
Laboratory extruder	neg.	neg.	-	-	-	-	-
Total Emissions	19.7	19.7	-	1.00	-	-	-

County Attainment Status

The source is located in Wayne County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR Part 52.21.
- (b) Wayne County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR Part 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	6.12
PM ₁₀	6.12
SO ₂	-
VOC	1.00
CO	-
NO _x	-

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of two hundred-fifty (250) tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on this application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit Registration 177-16859-00104, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPS is less than twenty-five (25) tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Wayne County and the potential to emit PM₁₀ is less than one hundred (100) tons per year, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this

permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-1 (Particulate rules; nonattainment area limitations)

This source is not subject to the requirements of 326 IAC 6-1, because the potential PM emissions are less than one hundred (100) tons per year.

326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies)

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) Holcosil process shall not exceed 1.36 pounds per hour when operating at a process weight rate of 0.192 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The portable dust collector shall be operated at all times that the Holcosil mixer is in operation, in order to comply with this limit.

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) Holcoprill process or the laboratory extruder shall not exceed 0.551 pounds per hour when operating at a process weight rate less than one hundred (100) pounds per hour.

The associated dust collectors shall be operated at all times that one (1) Holcoprill process or the laboratory extruder is in operation, in order to comply with this limit.

Conclusion

The construction and operation of this colorant manufacturing source shall be subject to the conditions of the attached proposed New Source Construction and Registration **177-16859-00104**.